

# **October 22, 2003 - HRVOC Work Group Meeting 2**

## **DEQ Conference Center Room C 111, 1:30-3:30**

### **Safety Reminders**

### **Introductions**

### **Review Agenda**

#### **Review Work Group Objectives and Schedule**

- 1 Develop a scope of services for a contract study to determine the role of HRVOC in the BR ozone problem and determine resources needed*
- 2 Prepare and issue contract*
- 2 Oversee contract study*
- 3 Evaluate results and recommend solutions*

#### Schedule

*Dec-03*  
*May-04*  
*May-Nov 04*  
*Dec-04*

### **Organization**

*Complete core member list for Industry*

### **Baton Rouge VOC Data Analysis Overview by Mark Sather of EPA R6**

### **HRVOC Survey - Based on 2002 TRI**

### **Completion of Brainstorming Session - Study Elements**

### **Element Grouping and Formation of Sub-Groups**

### **Discussion of Sub-Group Tasks**

*Choose Group Leader*  
*Develop action plan*

### **Action Items**

### **Wrap-up**

*Sub-Group Meetings (split meeting - 1 hr for SG and 1 for combined?)*  
*Next meeting date*

## **Study Elements**

*Intense analysis of exceedances and near-exceedances (>110 ppb) in last 10 years*  
*Adequacy of number and location of HRVOC monitors and meteorology stations*  
*Accuracy of emission inventory reporting*  
*Reporting of TRI emissions by point source or type*  
*Use of portable analyzers for exceedance investigation/routine monitoring*  
*Targeted modeling of HRVOC and spikes*  
*Additional permit requirements needed*  
*Improvement of the Ozone Action Day prediction system*  
*Reporting on marine activities emissions*  
*Upper air monitoring*  
*Back-track trajectory procedures*  
*Follow-up on RQ reports, corrective actions*  
*Literature search*  
*Historical trend for NO<sub>x</sub> (similar to non-methane VOC)*  
*Breakdown of TRI between routine and non-routine*  
*Look at past exceedances with other evaluation tools*  
*5-minute met data*  
*Closer look at what Houston did/what worked, what didn't*  
*Met data from other sources*  
*Other traffic - pipeline, rail, truck (on-loading, off-loading)*  
*Upper level wind speed (UAM), low-tech solution with balloons*  
*Forecasting/Early warning system for Industry, equipment to facilitate program/call home/data logger*  
*Seasonal emissions/start-up/shutdown*  
*Invite Texas member to join*  
*Feasibility of open-path IR*  
**Develop database to manage NO<sub>x</sub>, VOC, meteorology information**  
**Design strategic monitoring plan for HRVOC for Summer 2004**  
**Environmental management program audit (Motiva-Norco)**  
**UAM modeling capability to test theories and possible solutions**

HRVOC Workgroup Meeting Minutes  
October 22, 2003

Maurice Oubre welcomed the group at its second meeting.

Safety and administrative notes were reviewed

Introductions of all attendees (attendee list attached)

Review agenda for meeting

Reminder that the group will focus only on HRVOC

Schedule: Scope of work for contract by December 2003

Recommendations by December 2004

Item 1. Core member list

DEQ has identified its members on the core group along with a representative from LEAN. LCA requested more time to identify core group members from industry. However LCA did have industry representatives for sub-group membership.

Members identified so far:

DEQ

Maurice Oubre  
Jim Hazlett  
Manop Vanichchagorn  
Jennifer Walton  
Jim Orgeron  
Vivian Aucoin

Industry and Associations

Richard Metcalf - LMOGA  
Moriama Grinnell – ExxonMobil Pipeline Company  
Henry Graham - LCA

Others

Mike McDaniel  
Gary Miller—LEAN  
Maria Martinez—EPA Region 6  
Mark Sather—EPA Region 6  
Chad Scott—Marine Chemists of LA, LLC

Item 2. Explosive ozone formation comparison between Baton Rouge and Houston given by Mark Sather of EPA Region VI.

During the discussion after the presentation it was noted that the emissions data (TRI and EI) don't compare well to the ambient concentrations. The group discussed trying to determine who tests and who uses emission factors. Mark indicated that he would like to see an additional PAM site located in the area around Geismar. When asked why he pointed out that there is "lots of NOx". The Plaquemine and Pride sites indicate similar trends. The group asked for more analysis and Mark will continue with his analysis. The briefing will be posted on the DEQ public web page.

### Item 3. HRVOC Survey

Facilities will have 60 days to complete the special inventory. The draft form was reviewed and instructions were explained. There was a question about how non TRI reporters were to speciate their VOCs. DEQ will investigate. After some discussion it was decided to merge TRI and EI lists. SCC code was also an issue. DEQ was asked what they plan to do with the results of the survey. DEQ responded that the purpose of the survey was to try to determine where the bulk of the routine HVROC emissions occur and then DEQ could give some thought on controlling these emission sources. The workgroup believes that emissions could well be still under reported. For those facilities using emission factors, emissions are sometimes overestimated. DEQ might be driven to regulate a type of source that may not be the problem. Some discussion about data precision issues (rounding, significant digits) – may lose hundred of pounds. Questions concerning whether the form captures continuous versus episodic releases. DEQ will consider including a request for duration information. The workgroup believes that it is too much to ask for each individual episodic release. The group was advised to use the Texas study to start looking at cooling towers, flares, and fugitives. DEQ plans to mail the survey out Friday, October 24, 2003. It will be due December 23, 2003. What about NOx? DEQ already has data on electrical utilities. DEQ may do a separate survey on NOx. The group was interested on which facilities have already installed NOx RACT. What about Chlorine emissions? That is outside the scope of the HRVOC workgroup.

### Item 4. Brainstorming (continued)

Lessons learned from Houston (UAM model and others lessons) (EPA offered to present their modeler's insight) Doug Deason will be invited to a future meeting to give an overview of the plan that was developed for Houston/Galveston. Other models available? (CAMx, REACTx) The group's feelings were that all of the models are about the same and would give similar results. The reason that the ozone peaks are not showing up in the model runs could be the way that the emissions are input – mostly annual amounts divided into hours. Chase baseline or peaks?

### Item 5. Organizing subgroups

Next meeting: plan is to meet one hour in subgroups and then one hour as the whole group. The subgroups may have an interim DEQ leader until the subgroup meets. 3 rooms will be reserved.

Applies to all Subgroups: Need Leader and Co-leader and action plan  
Subgroup 1. Exceedances/Data Analysis

Richard Metcalf  
Jim Hazlett  
Jim Orgeron  
Gary Miller  
Mark Sather  
Brian Eastep  
Quang Nguyen(EPA)  
Michelle Eaglin  
Dave Fellows  
Mike McDaniel  
Yousheng Zeng  
Raymond Allen (Raymond\_Allen@urscorp.com)  
Michael Hebert (Michael\_Hebert@urscorp.com)

Subgroup 2. Emission/Meteorology Monitoring

Manop Vanichchagorn  
Mark Sather  
Brian Eastep  
Mike McDaniel  
Chris Baldrige  
Ron Crum

Subgroup 3. Emission Inventory

Moriama Grinnell  
Jennifer Walton  
Herb Sherrow (EPA)  
Mike McDaniel  
Chad Scott  
Tom Micklas  
George Jones  
Bill Bailey (WMBailey@Dow.com)  
Sharon Caughman  
Mike Hannan  
Brad Stahlecker  
John Martinez  
Cheryl Dawson

Action Items:

DEQ will investigate the survey of facilities who do not report the TRI  
Next Meeting: Thursday, November 6, 2003, 1:30-3:30.